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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/429,935 10/29/99 SHICHIJYO

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MM91/0925

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EXAMINER

GONZALEZ, J.

ART UNIT	PAPER NUMBER
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2834

DATE MAILED:

09/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/429,935	SHICHIJYO, AKIYA
Examiner	Art Unit	
Julio C. Gonzalez	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 03 July 2001.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-19 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 03 July 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the two lead wires passing through the lead wire holes proximate respective input terminals to connect the stator disclosed in claim 16 and the plurality of input terminals positioned on the outside of the rectifier extending towards the lead wire holes as disclosed in claim 17 and the diodes being connected to at least two wires as disclosed in claim 18 and the pair of *lead wire passages* supporting the wires as disclosed in claim 19 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

3. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant discloses in claim 19 a pair of passages supporting two wires. Are these passages the lead wire holes or another holes?

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umeda et al in view of Ooiwa et al and Adachi et al.

Umeda et al discloses an ac generator 1 for a vehicle comprising a rotor 3 having a shaft 6; a stator 2 having multi-phase stator winding 2 which has output for respective phase voltages; ac generator 1 further comprising a cooling fan 11 fixed to one end of rotor 3 and multi-phase stator winding 2 comprising a plurality of three-phase winding which are different in phase (see figure 18). Also, Umeda et al discloses a rectifier unit 5 which comprises a plurality of three-phase rectifiers (see figure 18) and stator winding 2 comprises a first star-connected three-phase winding and a second star-connected three-phase winding.

However, Umeda et al does not disclose output lead wires being used for the stator and fin parts in the ac generator.

On the other hand, Ooiwa et al discloses, for the purpose of improving the cooling performance in an ac generator, a rectifier unit 5 having input terminal connected to output lead wires which further comprises a terminal member 513 for holding the output lead wires. Also, the device having at least two output lead wires to be respectively connected to input terminal (see figure 5 and 6) and the rectifier unit 5

comprises a common positive cooling fin 501 and a common negative fin 503 (column 2, lines 23-27). Moreover the device has three lead wires each of which has a bundle of said output lead wires respectively extending from the pair of three-phase windings (see figure 5 and 6). Ooiwa et al shows a frame with a wall which supports the stator on one side and the rectifier on another (see figure 1). Also, a plurality of input terminals positioned at the rectifier unit and the input terminal extending from the rectifier (see figure 3) and the rectifier has a plurality of diodes. Ooiwa discloses inherently the wire holes since the wire leads are between a clearance of the small and larger fins (column 3, lines 1-6) and also since the wire leads are used for making an electrical connection in the alternator, but for the sake of showing that is commonly known in the art to make a lead wire hole in an alternator, another reference will be used.

Adachi et al discloses for the purpose of simplifying the alternator connections between the windings and armature, thus reducing cost of the device, that the alternator has leads holes for at least two wires to be connected (column 5, lines 4-6).

It would have been obvious to one having ordinary skill in the art to design an ac generator with a shaft, a rotor, stator, a plurality of three-phase stator winding, a cooling fan and a plurality of rectifiers as disclosed by Umeda et al and to include a positive and negative fin and terminal members with lead connections each of which has a bundle for the purpose to improve the cooling performance of an ac generator as disclosed by Ooiwa et al and to make wire lead holes for the purpose of simplifying the alternator connections between the windings and armature, thus reducing cost of the device as disclosed by Adachi et al.

***Response to Arguments***

6. Applicant's arguments filed 7/3/01 have been fully considered but they are not persuasive.

Applicant stated that Umeda does not disclose an ac generator having a frame with a wall to support the stator on one side and the rectifier on the other side. However, in light of the new limitation and clarification of the claims, Ooiwa et al shows a frame with wall which supports the stator on one side and the rectifier on another (see figure 1).

Also, a plurality of input terminals positioned at the rectifier unit and the input terminal extending from the rectifier (see figure 3) and the rectifier has a plurality of diodes.

Moreover, Ooiwa et al discloses inherently lead wire holes since the leads are in a clearance between the fins. Also, the bundles are shown in figure 5 by Ooiwa et al.

Also, the applicant did not show very clearly the openings or defined the wire holes and the wall from the beginning and still does not show the leads passing through the holes and making an electrical connection in the stator and the holes in the frame as in figure 1 from the specification of the applicant).

7. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., issue of reducing manufacturing cost of the generator by reducing the number of lead wire holes that need to be formed within the frame) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371.

Art Unit: 2834

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



NESTOR RAMIREZ  
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TECHNOLOGY CENTER 2800

Jcg

September 23, 2001